

REMARKS

Claims 6, 26-36 and 50 are currently pending in this application; with claims 6, 26 and 50 being independent. Claims 37-49 have been cancelled with prejudice or disclaimer of the subject matter therein. New claim 50 has been added to define additional aspects of the invention.

Applicants respectfully request reconsideration in light of the claim amendments and comments presented herein, and earnestly seek timely allowance of the pending claims.

Impropriety of Finality of Office Action

The Examiner indicated that the outstanding Office Action was made final. Applicants submit that this was an improper final Office Action because a new grounds of rejection was applied to an unamended independent claim. Specifically, originally filed claim 6 had a new and different grounds of rejection applied than what was applied in the first Office Action mailed July 28, 2004.

“Under present practice, second or any subsequent actions on the merits shall be final, except where the Examiner introduces a new ground of rejection that is neither necessitated by Applicants’ amendment of the claims nor based on information submitted in an Information Disclosure Statement filed during the period set forth in 37 CFR 1.97(c) with fee set forth in 37 CFR 1.17(b).” See MPEP 706.07a (revised 8th edition, May 2004).

Accordingly, Applicants respectfully request the Examiner withdraw the finality of the outstanding Office Action.

Claim Rejections – 35 USC §103

In the outstanding Office Action, the Examiner rejected claims 6 under 35 USC 103(a) as being unpatentable over US Patent No. 6,330,976 to Dymetman et al. (“Dymetman”) and US Patent No. 6,176,425 to Harrison et al. (“Harrison”). Applicants submit the Examiner has failed to establish a *prima facie* case of obviousness and traverse this rejection.

Regarding claim 6, Dymetman merely teaches a method and apparatus which relates to a marking medium area that has markings encoding an identifier for producing action through a network (col. 1, lines 10-13). Dymetman further teaches techniques, which employ actions/medium identifiers encoded in machine-readable markings on a marking media such as sheets or stickers of paper or documents. The user may manipulate a detection device (in the form of a pen) and capture local images of portions of the hardcopy document. The document contains markings that encode an identifier and locations or zones within the substrate. Specifically, Dymetman teaches utilizing Xerox DataGlyphs for machine-readable markings, which encode a page identification code and, optionally, a page-location code identifying a position of the markings relative to the page (col. 8, lines 45-67). The machine-readable markings include cells 202 that include a border 204 and an orientation marker 206. A first set of markings 208 over part of the interior of the cell 202 provides an encoded representation of a page identifier. A second set of markings 210 over a smaller part of the interior of the cell 202 provides an encoded representation of a location code uniquely defining the position of the cell 202 within the page (col. 12, lines 47-53). Specifics of the markings used for data encoding are found in Fig. 5b, using DataGlyph markings (col. 13, lines 33-44), using successive divisions of regions of a page into quadrants (col. 13, line 58 through col. 14, line 5; Fig. 6a), and zones

containing a grid of binary markings (col. 14, lines 5-15; Fig. 7).

However, Dymetman fails to teach or suggest, at least, “determining at least one absolute position by determining displacements of marks from nominal positions in the position coding pattern,” as recited in claim 6.

Harrison fails to cure the deficiency of Dymetman in this respect. Harrison merely teaches a system which identifies multiple electronic tags, wherein each tag generally has a unique electronically readable identification number, and provides various digital services in response to presentations of the electronic tags to electronic tag readers (col. 6, lines 40-45). Upon receiving a transmitted pulse from a tag reader, each tag transmits an identification number. Upon receipt of the identification number, a computer-based application program interprets the identification input stream, determines the application context, and provides appropriate digital services (col. 2, lines 41-62).

Applicants submit that neither Dymetman nor Harrison teach, at least, the feature of claim 6 quoted above. Accordingly, Applicants respectfully request the Examiner to withdraw the rejection of claim 6.

Claims 26-29 and 33-36 are rejected under 35 USC 103(a) as being unpatentable over Dymetman, Harrison, US Patent No. 5,652,412 to Lazzouni et al. (“Lazzouni”) and US Patent No. 6, 832,717 to Silverbrook (“Silverbrook”). Applicants respectfully traverse this rejection.

Regarding claim 26, as provided in more detail above, Dymetman teaches a detecting device which is manipulated by a user to capture local images of portions of a hardcopy document. The document can contain special markings, which can encode page identifiers and

positions within a page (col. 8, lines 45-67). Harrison merely teaches a system, which determines identification numbers from electronic tabs, and provides digital services based upon these tags (col. 2, lines 30-67).

However, neither Dymetman nor Harrison teach or suggest, at least, “determining said at least one absolute position by determining the displacements of the markings from the nominal positions in the recorded part of the position code,” as recited in claim 26.

Lazzouni fails to cure the deficiencies of Dymetman and Harrison in this respect. Lazzouni merely teaches an information recording system having a writing paper with a surface having a pre-recorded invisible pattern of pixels associated therewith. Each of the pixels contains encoded optically readable position information, which identifies a coordinate position on the writing surface (see abstract). The system includes an optical pen having two detection modes, one for absolute position detection and one for relative position detection. When the pen is first placed on the paper, the absolute position of the pen is unknown and the pen must operate in the absolute position detection mode. Once the absolute coordinate position of the pen on the paper is known, subsequent absolute positions can be determined by detecting the relative changes and X- and Y-coordinates with respect to the initial absolute position (col. 5, lines 55-63). The encoded paper 14 has a pre-recorded pattern of pixels, which contain position information. A single pixel, as shown in Fig. 4, includes a plurality of horizontal and vertical data lines (col. 6, lines 35-60). A total of 8 identifiable and distinct lines and the spacing therebetween provide the basis for an algorithm for determining position on the paper (col. 7, lines 15-18). In Fig. 12, Lazzouni shows a grid to illustrate how the pen tracks position on the paper. The pen starts out at a starting value, and a series of vectors are incrementally added to

the initial starting points to obtain the absolute position (col. 13, lines 13-24; Figs. 12 and 13).

Silverbrook also fails to cure the deficiencies of Dymetman, Harrison, and Lazzouni. Silverbrook merely teaches a user interface with a computer system, which utilizes a sheet of paper and a sensing device (abstract). Specifically, the user utilizes a netpage pen 101, which interacts with coded data on a printed netpage and communicates, via a short-range radio link, the interaction to a netpage printer. The netpage printer sends the interaction to the relevant netpage server for interpretation (col. 7, lines 62-66; Fig. 2). The netpage contains tags, which are printed in infrared-absorbent ink. The tag is sensed by an area image sensor in the netpage 10, and the tag data is transmitted to the netpage system (col. 9, lines 55-63). Each tag identifies a region in which it appears, and the location of that tag within the region (col. 10, lines 13-14). Each tag contains 120 bits of information which are redundantly encoded using a Reed-Solomon code (col. 10, lines 52-61). The overall tag shape is circular, where each data bit is represented by a radial wedge 510 in the form of an area bounded by two radial lines 512, an inner radial arc 514 and a radial outer arc 516. Each 4-bit data symbol is represented by an array 518 of 2x2 wedges 510 (col. 11, lines 36-49; Fig. 48).

Applicants submit that Silverbrook fails to teach or suggest, at least, determining at least one absolute position by determining the displacements of the markings from nominal positions in the recorded part of the position code. Instead, Silverbrook directly encodes binary data into circular wedges of circular-shaped tags.

Accordingly, Applicants respectfully request the Examiner to withdraw the rejection of claim 26. Claims 27-29 and 33-36 depend from allowable claim 26 and are allowable at least by virtue of their dependency.

The Examiner rejected claim 30 under 35 USC 103(a) as being unpatentable over Dymetman and further in view of US Patent Publication No. 2001/0053980 to Suliman, Jr., et al. (“Suliman”). Applicants disagree and traverse the obviousness rejection.

Claim 30 depends from allowable claim 26, and by virtue of its dependency includes all of the recitations of the base claim. Dymetman fails to teach all of the limitations for claim 26 as provided in the arguments for these respective claims above. Silverbrook fails to cure the deficiencies of Dymetman. Accordingly, Applicants respectfully request the Examiner to withdraw the rejection of claim 30.

The Examiner rejected claim 31 under 35 USC 103(a) as being unpatentable over Dymetman in view of US Patent No. 5,852,809 to Abel et al. (“Abel”). Applicants disagree and traverse this rejection. Claim 31 depends from allowable claim 26, and includes all the features recited therein. Dymetman fails to teach or suggest all the features in claims 26, as explained in the arguments provided above. Abel fails to cure the deficiencies of Dymetman in this respect. Accordingly, Applicants respectfully request the Examiner to withdraw the rejection of claim 31.

The Examiner rejected claim 32 under 35 USC 103(a) as being unpatentable over Dymetman and further in view of US Patent Publication No. 2002/0023029 to Denver (“Denver”). Applicants respectfully traverse this rejection.

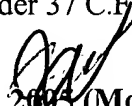
Claim 32 depends from allowable claims 26, and includes all of the features recited therein. Dymetman fails to teach or suggest all of the features recited in claims 26, as provided above in the arguments for the allowability of this claim. Denver fails to cure the deficiencies of Dymetman in this respect. Accordingly, Applicants respectfully request the Examiner to withdraw the rejection of claim 32.

Conclusion


In view of the above amendments and remarks, this application appears to be in condition for allowance and the Examiner is, therefore, requested to reexamine the application and pass the claims to issue.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Michael K. Mutter (Reg. 29,680) at telephone number (703) 205-8000, which is located in the Washington, DC area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.


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Respectfully submitted,

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